

# TWSTFT activities at PTB

D. Piester, A. Bauch, J. Becker, T. Polewka, M. Rost,  
E. Staliuniene

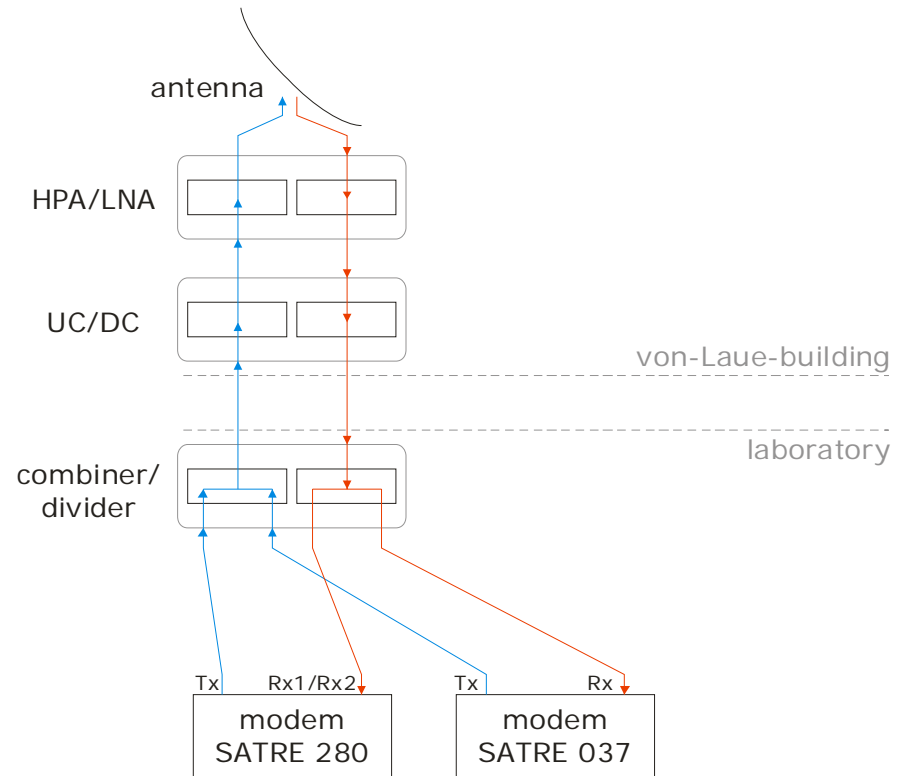
# Whats new?

New UC/DC will be implemented soon

Combiner/divider enables operation of two modems in parallel

New modem is implemented and runs under test

**Spare parts for each component will be ready for operation after implementation is completed.**



# New Software

SATRE data output

Operation test:  
ranging measurement

Terminal

Settings Processing of raw data Receive statistics Frequency Power C/N0 Connections Info

Date 2006/09/07 MJD 53985 UTC 14:53:40

```
%Tx >2006/09/07;14:53:40;280;00000;INT;1_0;L;yyym;yyyyuuuu; 0.0;56.1; 0.0
%Rx1>2006/09/07;14:53:40;280;00000;INT;1_0;L;yymin;T;3; 6
%Rx2>2006/09/07;14:53:40;280;00000;INT;K_0;L;yymin;T;3; 4
%Rx3>2006/09/07;14:53:40;280;00000;INT;1_0;L;yymin;T;3; 4
```

Channel status

Receiver	Rx1	Rx2	Rx3	State
Receiver	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> unlocked
Samples	0	0	0	<input type="radio"/> locked
				<input type="radio"/> format error

PTB ranging

Receiver	Rx1	Rx2	Rx3	State
Receiver	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reseted
				<input type="radio"/> ranging OK
				<input type="radio"/> ranging error
				<input type="radio"/> past ranging error

Schedule

```
SAMPL 144600 120 xxxxxx xxxxxx
RXON 144801 NIST01 xxxxxx xxxxxx
SAMPL 144900 120 xxxxxx xxxxxx
RXOFF 145101 OFF xxxxxx xxxxxx
STAT 145110 ANOFF
STAT 145115 KX2OFF
DCSER 145116 DCEUR
STAT 145120 SFEUR
STOP 145125
-----
START 150001
STAT 150000 xxxxxx
```

Errors and warnings

```
2006/09/07 10:29:59 SP01: no 1 sec data
2006/09/07 10:41:59 IPQ01: no 1 sec data
2006/09/07 12:41:59 IPQ01: no 1 sec data
2006/09/07 14:41:59 IPQ01: no 1 sec data
```

Start Stop

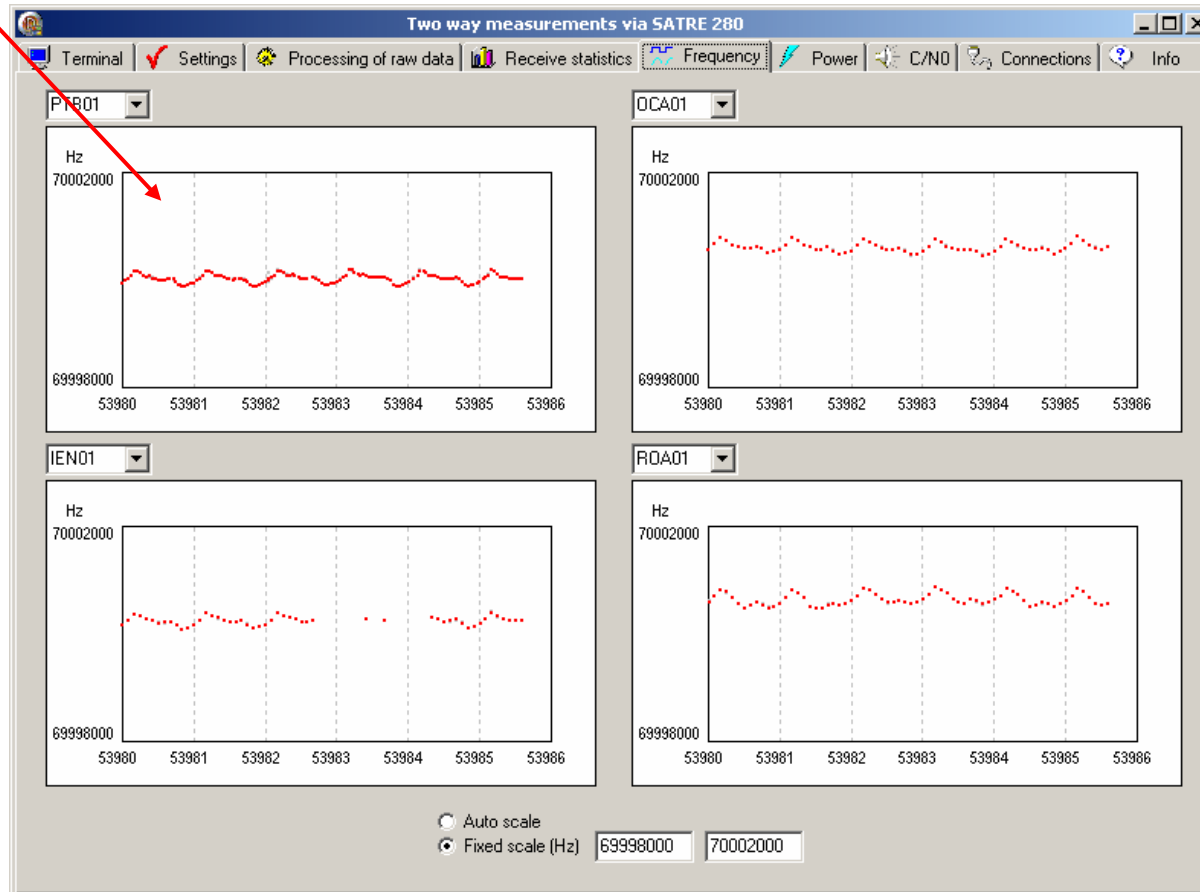
schedule

Log data



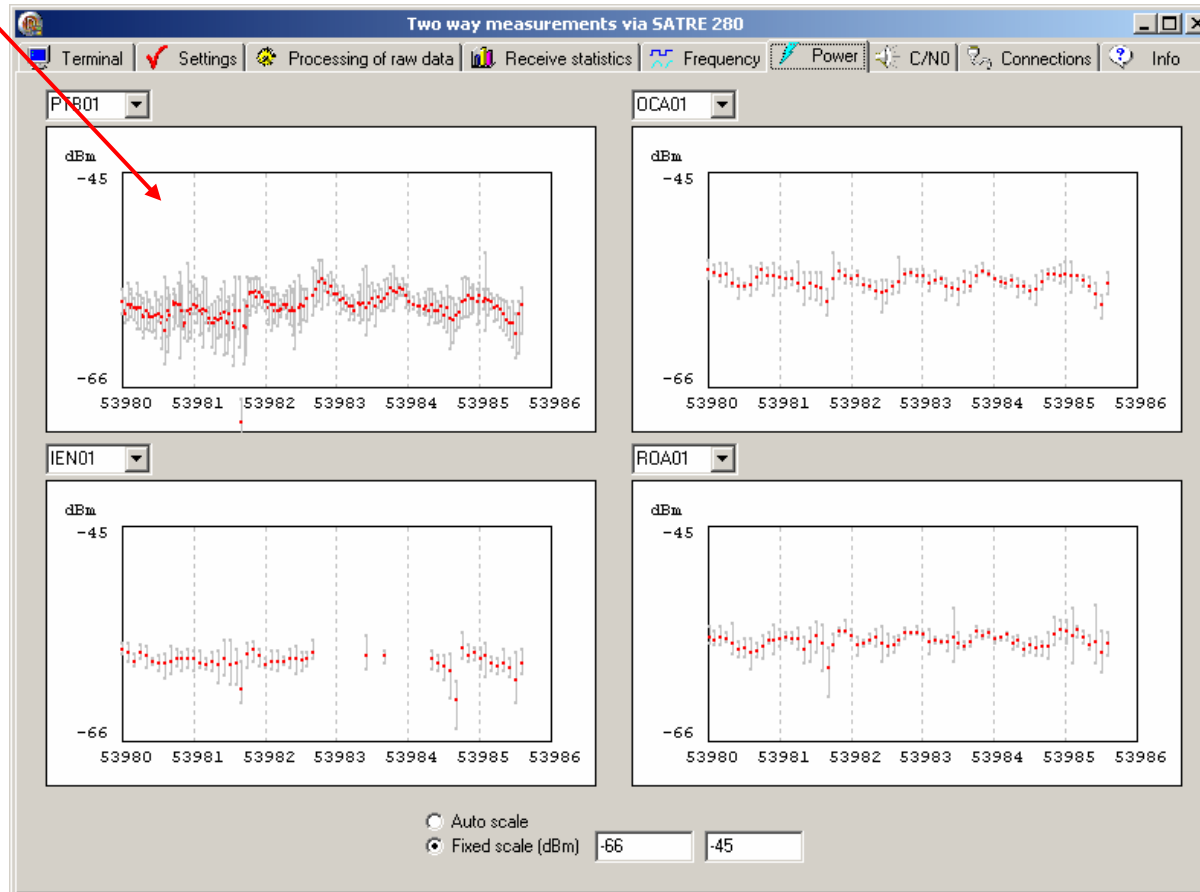
# New Software

Rx frequency



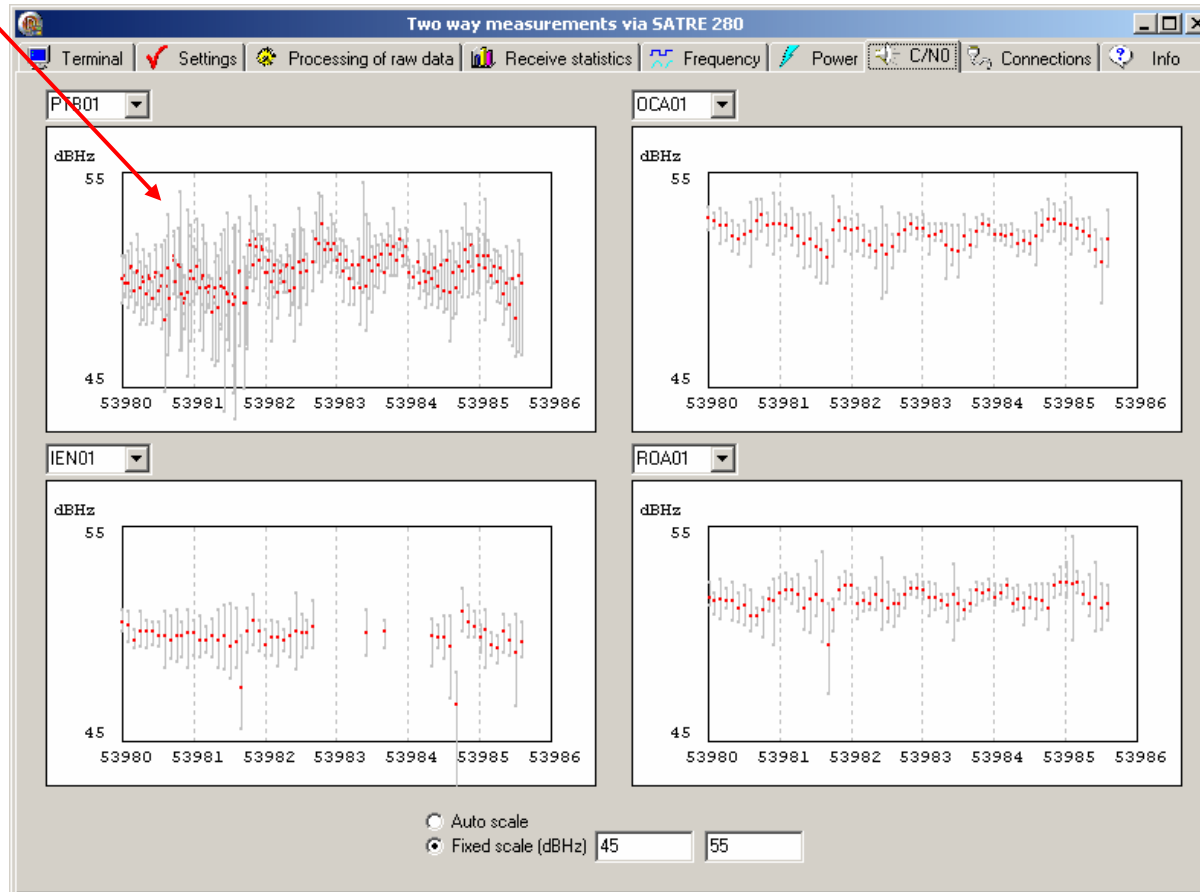
# New Software

Rx power



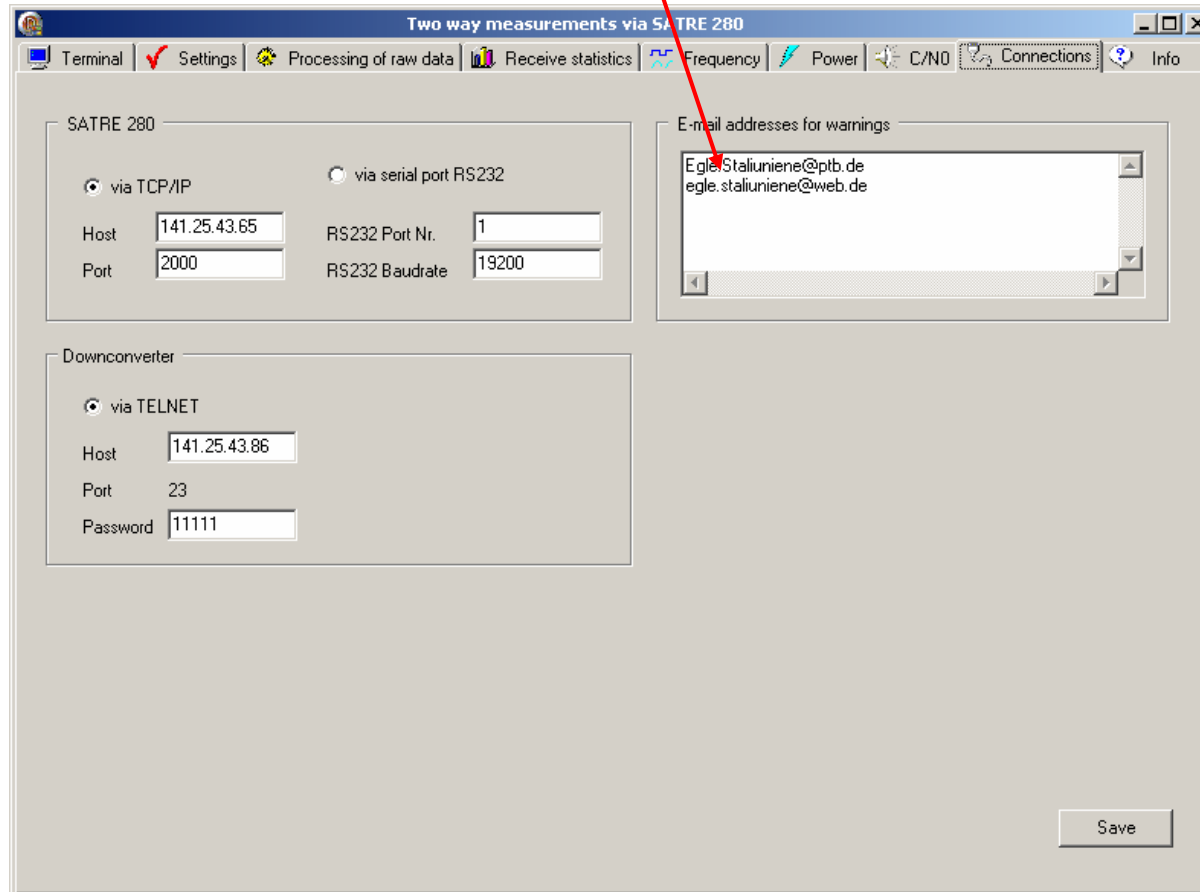
# New Software

Rx C/N0



# New Software

E-mail notification in case of operation failure





# Calibration Activities

## **Calibration of the TWSTFT links USNO – PTB**

carried out by USNO with a portable X-band station

## **European Calibration trip**

TUG – PTB – METAS - TUG